

REMARKS

The Office Action mailed May 25, 2006 has been received and the Examiner's comments carefully reviewed. Claims 3, 5, 10, 16, and 18 have been amended. Claims 22 and 23 have been added. No new subject matter has been added. Claim 19 has been cancelled. Claims 1-14, 16-18, and 20-23 are currently pending. Applicants respectfully submit that the pending claims are in condition for allowance.

Claim Objections

The Examiner objected to claim 16 for depending upon cancelled claim 15. Claim 16 has been amended to correct this error. In light of this correction, Applicants respectfully request withdrawal of this objection.

Rejections Under 35 U.S.C. §102

I. The Examiner rejected claims 9, 20 and 21 under 35 U.S.C. §102(b) as being anticipated by Elliott et al. (U.S. Patent 6,129,852). Applicants respectfully traverse this rejection.

Claim 9 recites a nozzle having a nozzle body and a diffuser arrangement. The Examiner asserts that Elliot discloses a nozzle (9) having a primary fluid passage 18 and multiple exhaust tubes 14. It is respectfully noted that the nozzle (9) and the description in col. 4, lines 16-35 to which the Examiner refers, is prior art described by Elliott, and is not a description of the nozzle 2 of FIG. 2 of Elliott, to which the Examiner also refers. It is therefore not clear what elements of Elliott the Examiner has characterized as a nozzle and what elements the Examiner has characterized as a diffuser arrangement. Clarification as to what particular elements the Examiner is referring to as a nozzle, a nozzle body, and a diffuser arrangement is respectfully requested.

Applicants have nonetheless attempted to address the Examiner's rejection as best understood.

1. nozzle body defining multiple exhaust tubes

Claim 9 recites a nozzle having a nozzle body. A primary fluid jet passage is defined by a first end of the body. Multiple exhaust tubes are defined by a second end of the body.

Elliott discloses a nozzle 2. The nozzle 2 has a blow tube 32 that defines a primary fluid jet passage. The nozzle 2 however does not define multiple exhaust tubes. The nozzle 2 of Elliott only has a single exhaust passage. The Examiner refers to elements 18 of Elliott as a primary fluid jet passage, and elements 14 as multiple exhaust tubes. Elements 18 of Elliott are part of a flow control member 4 that attaches to the end of the nozzle 2. In particular, elements 18 are extensions 18 of legs 24 that are clamped about the nozzle 2 of Elliott by a clamping collar 22. The extensions 18 secure a conical portion 6 of the flow control member 4 in relation to the nozzle 2. Elements 14 of Elliott are holes 14 formed in the conical portion 6 of the flow control member 4. A "hole" does not meet the structural limitations of a "tube," as required by claim 9.

It is respectfully submitted that the extensions 18 of Elliott cannot be properly characterized as a body defining a primary fluid jet passage. It is also respectfully submitted that Elliott simply does not disclose multiple exhaust "tubes."

2. diffuser arrangement located adjacent to the nozzle body

In light of the Examiner's reference to elements 18 and 14, it appears that the Examiner is characterizing the flow control member 4 of Elliott as a nozzle body. There is then no diffuser arrangement located adjacent to the end of the flow control member 4, as required by claim 9.

At least for any one of the above reasons, Applicants respectfully submit that independent claim 9, and dependent claims 20 and 21 are patentable.

II. The Examiner rejected claims 10-14 and 16-18 under 35 U.S.C. §102(b) as being anticipated by Simonsen et al. (U.S. Patent 6,332,902). Applicants respectfully traverse this rejection.

A. Claim 10

1. valve having first and second seals

Claim 10 recites an arrangement including a valve mounted to a manifold. The valve includes first and second seals.

Simonsen discloses a cleaning nozzle arrangement including a control valve 15, a feeding pipe 14, and a nozzle 11 (FIG. 1 of Simonson). The control valve 15 releases a burst of gas, which flows down through the feeding pipe 14 and through the nozzle 11.

Simonsen does not disclose that the control valve 15 has first and second seals; and the Examiner has not pointed out where Simonsen discloses such seals. If the Examiner maintains this rejection, the Examiner is requested to point out, specifically, where Simonsen discloses or suggests a valve having first and second seals.

2. sealing contact of the first and second seals

Claim 10 recites that the first seal of the valve provides sealing contact between the valve body of the valve and an outer surface of the manifold, and that the second seal provides sealing contact between the valve body and the interior of the manifold. Simonsen does not disclose that the control valve 15 seals against both an outer surface of the feeding pipe 14 and the interior of the feeding pipe 14. If the Examiner maintains this rejection, the Examiner is requested to point out, specifically, where Simonsen discloses or suggests a valve having such sealing contact.

3. a diaphragm that controls fluid communication

Claim 10 recites that the valve includes a diaphragm positionable in open and closed positions to control fluid communication through the valve. Simonsen does not disclose that the control valve 15 has a diaphragm. Simonsen is instead silent as to the particular control mechanism used to control flow through the valve 15. See, for example, columns 5-6, lines 65-9. If the Examiner maintains this rejection, the Examiner is requested to point out, specifically, where Simonsen discloses that the control valve 15 has a diaphragm.

At least for any one of the above reasons, Applicants respectfully submit that independent claim 10 is patentable.

B. Claims 11-14 and 16-18

1. valve body with tapering fluid passage

Claim 11 recites a valve including a valve body that defines a fluid passage. The fluid passage tapers from a first end to a second end.

The Examiner asserts that Simonsen discloses a valve 15, and a fluid passage "(see FIG. 2)" that tapers. It is respectfully noted that FIG. 2 does not even illustrate the control valve 15 to which the Examiner refers. FIG. 2 of Simonsen illustrates the nozzle 11 located at the end of the feeding pipe 14. Simonsen simply does not disclose that the control valve 15 has a tapering fluid passage, as required by claim 11.

In the event the Examiner is characterizing the nozzle 11 as a valve, it is noted that the nozzle 11 does not have a mounting flange with openings formed between the mounting flange and the valve body, and also does not have a diaphragm selectively positionable in open and closed positions to control fluid communication through the fluid passage of the valve body.

2. mounting flange and openings

Claim 11 recites that the valve includes a mounting flange interconnected to the valve body, and a plurality of openings formed between the mounting flange and the valve body. The openings are in fluid communication with the tapering fluid passage of the valve body. This particular limitation has not been addressed by the Examiner; i.e., the Examiner has not suggested that Simonsen discloses a mounting flange and an arrangement of openings, as required by claim 11. It is respectfully submit that Simonsen does not in fact disclose this particular arrangement of elements.

3. a diaphragm selectively positionable in open and closed positions

Claim 11 recites that the valve includes a diaphragm. At least for similar reasons as discussed above with regards to claim 10, Applicants respectfully submit that Simonsen does not disclose that the control valve 15 includes a diaphragm.

At least for any one of the above reasons, Applicants respectfully submit that independent claim 11, and dependent claims 12-14 and 16-18 are patentable.

Double Patenting

The Examiner asserts that claim 19 conflicts with claims 1-4, 6, and 20 of Application No. 10/731,564. Applicants respectfully traverse this assertion, but have cancelled claim 19 to advance this application to allowance.

Allowable Subject Matter

The Examiner indicated that claims 1-8 are allowable. Applicants thank the Examiner for this notification.

New Claims 22 and 23

New claims 22 and 23 depend upon claim 9. At least for the reasons discussed with regards to independent claim 9, Applicants respectfully submit that dependent claims 22 and 23 are patentable.

SUMMARY

It is respectfully submitted that each of the presently pending claims (claims 1-14, 16-18, and 20-23) is in condition for allowance and notification to that effect is requested. The Examiner is invited to contact Applicants' representative at the below-listed telephone number if it is believed that prosecution of this application may be assisted thereby.

Although certain arguments regarding patentability are set forth herein, there may be other arguments and reasons why the claimed invention is patentably distinct. Applicants reserve the right to raise these arguments in the future.



Date: July 25, 2006

Respectfully submitted,

MERCHANT & GOULD P.C.
P.O. Box 2903
Minneapolis, Minnesota 55402-0903
(612) 332-5300

A handwritten signature in dark ink, appearing to read "Karen A. Fitzsimmons". The signature is written in a cursive, flowing style and is positioned above a horizontal line.

Karen A. Fitzsimmons
Reg. No. 50,470
KAF:cjc